POLICY MEASURES TO FACILITATE METHYL BROMIDE PHASE-OUT

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Governments in developing and industrialized countries are now working to implement the phase-out schedule for methyl bromide agreed under the Montreal Protocol in 1997. Establishing a policy framework at national level is important for meeting the Protocol commitments, and for effective use of technical and financial assistance such as R&D and training programs. Consultation with stakeholders is an important part of policy development.

This paper will outline a variety of policy options, providing illustrations of measures adopted by countries around the world.

- Adjustment of existing agricultural programs eg. grants, technical assistance
- Review of fiscal measures eg. investment signals, tax relief, import duties
- Review of pesticide controls
- Information dissemination and environmental labeling
- Review of phase-out successes
- Policy development steps

MBTOC has identified many cases where effective and viable alternative techniques are used by commercial operations in diverse climates (MBTOC 1998:71-90, 224-225, 271-291; GTZ 1998). In some regions alternatives are used by large numbers of growers in sectors that are subject to the pressures of global competition (Gutierrez 1997; Rodríguez-Kabana 1998; Bello et al 1998, Bello et al 1997).

Adjusting existing agricultural programs

Agricultural institutions, government departments and farming organizations promote certain types of agricultural production and exports by providing extension, technical assistance, training, grants or subsidies for specific activities or inputs. These programs and activities give technical and economic signals to growers, and help to determine their choice of pest control methods and technology.

Such programs could be reviewed and adjusted so that they promote the adoption of alternatives and no longer promote use of MB and MB-related technologies. The regional government of Ragusa in Italy, for example, has subsidized the purchase of equipment such as machinery and plastics for solarization to encourage farmers to adopt new agricultural technologies in general (not as a measure to replace MB) (Vickers 1995). Many research institutions provide extension activities that could be adjusted to include information about alternative methods of pest control. Table 1 provides other examples.

Reviewing fiscal measures

A number of countries have places import duties on ozone depleting substances (ODS), or have reduced duties and taxes on alternatives, making alternatives more attractive. Table 2 provides examples from several countries.

<u>Improving pesticide regulations</u>

Most countries have laws and/or regulations that control the sale, distribution and use of pesticides in general, including methyl bromide. It can be valuable to review existing controls on methyl bromide to identify areas where changes can be made to promote other pest control techniques. Table 3 provides illustrations of measures that could be considered. The examples are drawn from countries that have improved their controls on MB or other sunset pesticides.

For example, during the phase-out of methyl bromide as a soil fumigant in the Netherlands during the 1980s, a permit system was introduced for MB. Permits were issued on a case-by-case basis, equivalent to a pharmaceutical prescription. MB was deregistered for crops and uses where viable alternatives were available. Buffer zones were introduced and fumigation tarps had to be left on soil for 10 days.

Disseminating information

Commercial organizations and governments could assist MB users by providing information of the following types:

- Manuals and technical 'how to' booklets about alternatives
- List of grants and other financial support (eg. tax breaks) for alternative products, equipment and training
- Lists of companies that supply alternative products and services
- Studies identifying new business opportunities from manufacturing/supplying alternative products and services
- Information and environmental labeling for the public

Review of phase-out successes

This paper will examine cases where methyl bromide and other ozone-depleting substances have been phased-out, to identify policy measures that contributed significantly.

Assistance with policy development

The Multilateral Fund provides technical and financial assistance for developing countries to phase-out methyl bromide. This includes projects to develop national policy frameworks. Implementing agencies include UNDP, UNEP, UNIDO, World Bank and development agencies of industrialized countries such as Germany and the USA.

Table 1 Review of agricultural programs

Existing programs	Adjustments to encourage adoption of alternatives
Grants, cheap loans or subsidies for inputs, equipment purchase and new agricultural technology	Review and amend criteria for receiving assistance, so that alternatives are actively supported and technology related to methyl bromide is not subsidized
Agricultural extension, advice, technical assistance and training, and funds for these activities	Change criteria for assistance so that activities and extension funds give priority to alternatives
Import substitution programs and rural development programs	Amend criteria for giving assistance, to encourage local companies, particularly in rural areas, to provide alternative services and products

 Table 2
 Examples of fiscal signals

Country	Example of measure
Australia ODS import duties and funds for alternatives	A\$ 10,000 fee for a two-year MB import license, plus a handling fee of A\$ 90 per tonne of MB imported. Fees go to a national Ozone Fund for demonstrating and promoting alternatives
Czech Republic ODS import duties	Duties or taxes on importers and producers of ODS. The tax was applied to MB from January 1996
Malaysia	Duties on all imports of MB fumigant
ODS import duties	
India Duty exemptions for non-ODS	Customs and excise duty exempted for goods required for setting up new capacity with non-ODS technologies
India Pesticide duties	18% duty on imports of pesticides in general, while duties on less toxic pest control products have been reduced from 30% to 5%
Denmark Pesticide tax and funds for alternatives	Environmental tax on pesticides as a 'polluter pays' measure, raising about US\$ 40 million per year for environmental programs and for assisting farmers to adopt non-chemical agricultural methods

Key: ODS – ozone-depleting substances

 Table 3
 Review of pesticide controls relating to methyl bromide (MB)

Areas controlled	Potential improvements in controls
Permitted list of uses for MB	Review permitted uses of MB to see where other pest control methods can be used
	Reduce permitted list of crops/pests where alternatives are available
	Prevent new uses of MB where possible
Frequency of MB soil applications	Where feasible, limit MB applications to one year in two or three, encouraging farmers to use alternatives in the interim
Pest monitoring before MB fumigation	Require pest monitoring prior to MB fumigation
Permit system for MB applications	Grant permits for MB applications – based on proof of pest problem and review of other pest control methods
	Require MB users to examine other feasible pest control methods and to explain why they cannot use other methods
MB sales outlets	Restrict sales of small (1-2 lb) canisters of MB
	Reduce the number of registered outlets that sell MB
Advertising and promotion of MB	Place prominent warning statement about ozone depletion on label and materials promoting MB
	 Require MB cylinders to carry a statement listing effective alternatives for specific major pests and contacts for information
	Restrict or prohibit all promotional materials
Combine MB with alternative treatments	 Reduce permitted doses by requiring MB to be combined with an alternative technique eg. solarization so that users start to get familiar with alternative techniques
Safety of workers and	Improve safety precautions at MB storage facilities
communities from potential accidents	Establish or increase buffer zones when MB is used
Local environment where MB is used	Prohibit use of MB near environmentally sensitive areas eg. nature reserves, areas with high water table

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